

TV6 Calculation for Paragon, IN

TV6 Call sign

WRTV	Fcc Search
City	61.1 dBu
Indianapolis	State
COR AMSL (m)	HAAT(m)
531	279
Latitude	Longitude
395357	861204

TV ERP (kW)
100.000

FM Horizontal ERP
1.15

Outside City Of 50k

Plot Scale
2000

DLG AJPI TIGER

Hide Zeros
 Plot All Centroids
 Plot Inside Centroid Counts
 Plot All Centroid Counts
 Plot Contours
 Print All Centroids to -3 dBu
 Print Centroids
 Print TV Contour Table

Comp **Copy F** **PrintText** **Print Form**

Channel Six TV Protection Study

WRTV 06 100.000kW ERP 531.0M COR AMSL 279.0M HAAT Lat. 395357 Lon. 861204
 Prop 215 15.500kW ERP 273.0M COR AMSL 58.4M HAAT Lat. 391917 Lon. 863108

Distance from TV to FM 69.7118km Azi 23.0degr Rev Azi 203.0 degr
Cutoff radius for channel 215 is 180 km

The FM horizontal polarization component is 1.150 kW,
 and the area of just perceptible interference does not intersect a city of 50k,
 so the effective EDR is ($Dx/40+Dy$) 1.5375kW.

The TWS signal strength at the EW transmit site is -61.125 dBm.

For F centroids (centroids where the TV6 signal strength is less than 68 dBu and which are also +70 degrees from line from the FM station to the TV station) a 6 dB bonus is added to the allowable FM signal.

EW Contour Undesired/Desired Ratio Total Directional Total

Concetr	Undesired/Desired Ratio	Total	Directional
57	13.2	70.2	76.2
58	12.2	70.2	76.2
59	11.2	70.2	76.2
60	10.4	70.4	76.4
61	9.6	70.6	76.6
62	8.9	70.8	76.8
63	8.2	71.2	77.2

Population in affected area 2623

2000 Block Centroids used